

REJECTION OF LECTOTYPIFICATION OF *ASTER AMELLUS* (ASTERACEAE: ASTEREAEE) AND SELECTION OF A NEW LECTOTYPE

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ABSTRACT

Selection of 997.18 (LINN) as the lectotype of *Aster amellus* L. is rejected because the specimen is in conflict with the protologue. A new lectotype is designated from authentic material seen by Linnaeus. Rejecting the original lectotypification and selecting an appropriate specimen circumvents the need for conservation or redefining the concept of the genus *Aster* L. Herb. Linn. 997.16 (LINN) is designated the new lectotype of *Aster amellus*.

RESUMEN

Se rechaza la selección del pliego 997.18 (LINN) como lectotipo de *Aster amellus* L. porque el espécimen está en conflicto con el protólogo. Se designa un nuevo lectotipo a partir de material auténtico visto por Linnaeus. El rechazo de la lectotipificación original y la selección de un espécimen apropiado evita la necesidad de conservación o redefinición del concepto del género *Aster* L. El pliego Herb. Linn. 997.16 (LINN) se designa nuevo lectotipo de *Aster amellus*.

Semple (1998) designated Herb. Linn. 997.18 (LINN) as the lectotype of *Aster amellus* L. (Astereaceae: Astereae). Recently, this lectotypification was found to be flawed and would result in a change in the application of the name *Aster* of which *A. amellus* is the generitype. The simplest solution to this situation is to reject the original lectotypification because the selection was in conflict with the protologue. An alternative solution would be to propose conservation of *A. amellus* with a conserved type, which does not seem necessary in this case.

In choosing 997.18 (LINN) as the lectotype for *Aster amellus* for the Linnaean Typification Project (Semple 1998), I worked from a set of small photographs I had taken in 1984 during visits to the Linnaean Herbarium (LINN) and the British Museum of Natural History (BM) and from additional notes made in 1994 on numerous authentic specimens of asters and goldenrods. Other authentic specimens were rejected as possible types then, and additional specimens and photographs have subsequently come to my attention. 997.18 (LINN) is here rejected as the lectotype for *Aster amellus* on the basis of being in conflict with the protologue. Article 9.17(b) of the ICBN (McNeill et al. 2006) permits the supersession of a lectotype, if it is in serious conflict with the protologue, and another element that is not in conflict is available. At least one specimen that does not conflict with the protologue, Herb. Linn. 997.16 (LINN), is available.

In the protologue of *Aster amellus*, Linnaeus (1753, p.873) indicated the occurrence of some variation in leaf and phyllary traits, and he noted the range as “Habitat in Europae australis asperis collibus,” that is, native to rugged hills in southern Europe. Leaves were described as “lanceolatis obtusis scabris trinervis integris” and phyllaries as “calycinis obtusis” in the diagnosis. LINN 997.18 has linear, uninervate rather than lanceolate trinervate leaves and linear acute rather than obtuse phyllaries. The small black and white

photograph of 997.18 (LINN) that I worked from was cropped and lacked critical annotations that are obvious in the colored image of the specimen currently posted on the Linnaean Typification Project web site <http://internt.nhm.ac.uk/jdsml/research-curation/projects/linnaean-typification/index.dsml>. Upon seeing this image, I knew immediately that I had made a mistake in my choice of lectotype for *Aster amellus*. The specimen was annotated “non A. Amellus” by James Edward Smith (Charlie Jarvis, pers. comm.), who bought Linnaeus’ herbarium and moved it to England, and as “Calimeris A.G” by Asa Gray. Clearly, these annotations are critical because they indicate the practical consequences of retaining 997.18 (LINN) as the type of *Aster amellus*, the generitype; the modern strict application of the name *Aster* (see Nesom 1994; Semple et al. 2002) would fundamentally have to be changed. 997.18 (LINN) is likely a member the *Galatella* Cass. / *Crinitaria* Cass. complex rather than *Aster*.

The second paragraph of the protologue deals with the first synonym Linnaeus cited from Hortus Cliffortianus. The voucher of the synonym cited as “Hort. Cliff. 407.” is Clifford Herb. No. 407 (BM!) and was diagnosed by Linnaeus as having leaves “lanceolatis scabris semiamplexicaulisbus serratus” and phyllaries as “lanceolatis.” Linnaeus noted that the “Hort. Cliff.” reference was previously cited in “Royen” and “Gmelin.” Clifford Herb. No. 407 (BM) is a possible choice for lectotype for *Aster amellus*. The specimen is a fragment, and in leaf features it is similar to Herb. Linn. 997.17 (LINN), a specimen of *A. pyrenaeus* Desf. ex DC. in Lam. & DC. The Clifford herbarium specimen is rejected as a choice for the new lectotype of *A. amellus*.

Retypification

Herb. Linn. 997.16 (LINN) is also an authentic specimen and is annotated “5 Amellus” likely by Linnaeus himself (Charlie Jarvis, pers. comm.). I have no data indicating I saw this specimen in 1984 or 1994. A photograph of this specimen was given to me after 1998 by Paul Van Faasen, who took the picture. The plant illustrated is very similar to plants in my research collection of *Aster amellus* collected for me in Switzerland by Dr. Erich Weber. 997.16 (LINN) and the Weber collections match the description of *Aster amellus* in the diagnosis of the protologue in both leaf and phyllary traits. These correspond well with the description and figures of *A. amellus* in Wagenitz (1979) and the description of the species in Merxmüller, Schreiber and Yeo (1976). Therefore, Herb. Linn. 997.16 (LINN) is here designated the new lectotype of *Aster amellus*.

Aster amellus L., Sp. Pl. 2:873. 1753. TYPE: EUROPE: habitat in Europae australis asperis collibus, [native to rugged hills in southern Europe], Herb. Linn. 997.16 (LECTOTYPE here designated as new: LINN).

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